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Urban Spaces, Disabled, and the Aim of a City for All: A Case Study of Tehran

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Abstract

A good city for everyone is one in which all the facilities and opportunities for a better life are accessible to everyone. According to the United Nations convention on the rights of persons with disabilities, around ten percent of the world's population- 650 million people live with a type of disability; and in effect, they can be considered as the World's largest minority. While, around eighty percent of these populations live in developing countries, Iran -as one of them- faces a more serious problem due to the eight-year war with Iraq (1980-1988). The war left many people injured and sharply increased the disability rate. In 2006 the number of disabled people in Iran was estimated to be over a million (1,012,222) individuals; and even twenty five years after the war, despite many laws aimed at helping the disabled, they still face tremendous difficulties. As the most outstanding instance it has been claimed that urban spaces in Thran (the capital) do not have the potential to serve people of all levels of ability – and disability. This article first sought a definition for a "City for All", and then pointed out some of the most outstanding problems that disabled people are confronted with in Tehran. One of the city districts was chosen for a case study, and some simple urban design methods and solutions were suggested to increase the comfort and frequency of disabled people using the urban spaces and facilities.

Keywords: Disability; A city for all; Sustainable Urban Development; Public spaces; Urban design

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1. Introduction

Disability is a comparative term, and has been addressed as an obstacle to human activities being carried out in a natural way. Until around 1980, the word handicap was mainly used rather than disability [1]. The main elements of disability are a lack of independence in a person's daily activities and life. Disability and handicap are also defined according to functional restrictions and significant decreases of daily activities compared to an individual's previous level of activity [2].

People with disabilities should not be lumped together in one group. In 1980, the World Health Organization defined disability and handicap based on a specific framework. In their classification they used three concepts: deficiency, disability, and handicap. Deficiency is defined as any loss or abnormality in the body or functions of a person physically or mentally. Disability is defined as any restriction in activities done by normal people [2]. Handicap, meanwhile, refers to the privations a person experiences as a result of disorders or disabilities. A handicap hinders a person's adaptation to, and interaction with, his/her environment. According to a definition made by the United Nations, "handicap" is an obstacle to participating in social life at the level of most people in society. Handicapped people thus may not take advantage of the benefits of an urban environment, and suffer from being misfits within the context of urban spaces.

On the other hand, it has been asserted that capabilities of disabled people are usually enhanced when environmental barriers are removed or minimized. They should be able to work, act, walk and go about their daily lives among normal people. A city does not only belong to groups of individuals; it is like a body, with its entire population as its cells. If every cell does its best, the overall body (city) will be healthier and stronger.

Anyway, handicap is a reality which all societies face, regardless of their level of development. Societal events such as wars and revolutions also cause handicap, which then has significant social consequences. The phenomenon of being handicapped appears in its own ways and forms, and according to the interpretations that society gives to it.

Sociologists have ascertained that a society cannot achieve a sustainable development unless its members participate in this process. Such participation must not be limited to a particular group, such as educated people, people belonging to a particular social level, and individuals in certain levels of physical ability. An important factor in a sustainable development process is everyone -regardless to the factors of age, sex, race, and range of ability- has equal rights.

It is undeniable that, in many developed countries, urban designers have tried hard to create urban spaces which can be used by everyone, with considerable success in some cases. As the first steps addressing the problems of this weaker section of society -people with physical disabilities- should be considered as a priority in developing countries. Restricting their opportunities leads not only to a lack of participation and happiness in those who are

discriminated against in this way, but can also be seen as an obstacle to the process of sustainable urban development.

2. Social justice in urban life

"The principle of equal rights implies that the needs of each and every individual are of equal importance, that those needs must be made the basis for the planning of societies and that all resources must be employed in such a way as to ensure that every individual has equal opportunity for participation." (Act 25 of the 37th UN's general meeting, 1994).

The concept of providing justice in urban life focuses on making changes for the benefit of groups of people who have more limited opportunities to take advantage of facilities than others. Measures to promote equal opportunities can be defined as a process by which broad elements of society such as the physical and cultural environment, housing and transportation, social and health services, sport facilities, and entertainment are provided for everyone. Not only does a disabled person need to adapt to his environment, but the general way in which a society is organized has to be adapted to such people [3].

From a theoretical point of view, everyone has a right to access and use urban spaces. Taking into account the circumstances and needs of physically disabled people in urban public areas, and considering those needs in developed countries after World War II, engineers, researchers, and urban planners have increasingly had to consider disabled people's needs and requirements as part of the society when planning urban areas.

3. Limitation and problems in urban spaces

As Oliver [4] notes, disabled people have been perceived as dependents, or individuals with a specific problem which marks them out as different from the rest of the 'normal' population. An important element in disabled people's lives is their ability (or otherwise) to gain access to particular places. However, various features of contemporary cities – including physical design, institutional policies and mobility systems – might have prevented disabled people from participating in the mainstream of urban social life. Evidence suggests that the physical construction of urban spaces – including both macro land use patterns and the internal design of buildings – often produces or reinforces distinctive spatial ties of exclusion for people with a range of physical and/or mental impairments, and serves to reinforce their 'incomplete citizenship' [5,6].

According to Gleeson [7], the 'Disability discrimination' takes the form of: (1) physical barriers to the movement of disabled people, including broken surfaces on thoroughfares, streets, gutters, paving and so on, all of which reduce or annul the effectiveness of mobility aids such as wheelchairs or walking frames. (2) Building architecture that excludes the entry of anyone unable to use stairs or hand-opened doors. (3) Public transport modes which assume that passengers have a common level of walking ability.

In addition to the problem of inaccessibility in public urban spaces, disabled people also experience barriers to choice in their preferred living and working environments. They are often denied employment opportunities because of inaccessible workplaces [6]. Considering all these dimensions, it can be concluded that inaccessibility and exclusion define a city of enclosure, a social space marked by institutional and physical barriers that separate disabled people from the mainstream of social and economic life [7].

Adapting urban areas is a major element in achieving equal opportunities for all people and citizens to travel and move across a city so as to provide access for everyone to every urban area and public space – all of which are a requirement for the healthy growth and development of a society [8].

Movement limitations and city and architectural obstacles are factors that affect the disabled's social participation in society. This can lead to isolating this group from wider society. In fact, the relation between a human being – disabled or normal – and his environment does not only relate to his or her place of residence. Rather, it encompasses the spiritual matters, thoughts and beliefs, common ceremonies, urban planning and emotions of all the people in a society. This theory takes on practical significance when human requirements acquire physical- spatial aspects, with the goal of achieving an environment which suits human needs [9].

Nowadays, disabled citizens have to travel to every corner of a city to fulfill their needs. If they constantly meet with such urban and architectural obstacles across the city, that can increase the burden on their physical disabilities and finally make them more reserved, introvert, and ultimately dependent – even if they had no intention of becoming such a person.

In their article entitled “Public urban areas; a qualitative revision and examination”, Rafieian and Seyfaee [10] concluded that the major factors determining the quality of public urban areas from the point of view of citizens (especially disabled people) are: 1 – cleanliness; 2 - access to urban areas; 3 – attractiveness; 4 – a relaxing environment; 5 - integrity; 6 - being active and dynamic; 7 – performance; 8 – distinction; 9 - safety and security; and 10 - power and health.

There are scholars who conducted research on measuring the level of satisfaction of people in relation to disabled people. First, they categorized disabled people (both mentally and physically) by the degree and severity of their disability. Their findings show that people with lower degrees of disability, and with greater contacts with others, had more meaningful satisfaction with their lives, not least through making friendly and intimate relationships. But more severely disabled people with fewer contacts suffered more from depression and mental and physical disorders.

Hanniff and Kheder [11], in an article named “Women with Disabilities in the Urban Environment”, noted that while women with disabilities are important members of Canadian society; yet inappropriately designed urban areas could prevent them integrating into society and instead push them to the margins of the urban economy. They found that access to city facilities was heavily influenced by factors like disability, sex, the level of urbanization, culture

and heritage, age, economic conditions, and social position. So care must be taken for such individuals in social and economic issues by designing and making suitable urban areas that will allow them to participate in social activities effectively.

In fact, people enjoy urban areas by looking and moving around them; and one of the first human needs is the freedom to move. In fact, the part of society with physical disabilities loses access to urban areas, then looks for the reasons in “being disabled themselves” rather than in “the city being disabled” – and consequently abandons those areas.

4. Case study: A district in Western Tehran

One of the districts in the west of the city of Tehran is studied. Its inhabitants have moderate income levels and about half of them are more than 50 years old. Many of them are older men and women who go shopping for their daily demands, and every afternoon gather near the shopping centre while chatting to their neighbours or walking slowly in the park with their grandchildren.

Although the elderlies make up the majority of inhabitants of this area, its urban design is not appropriate for them. Some of the deficiencies are reported and discussed below:

a) The streets have slight slopes. So we are faced by many levels which are typically connected by steps or stair-like structures, instead of ramps. These platforms are certainly unsuitable for disabled persons, children, and the elderlies (Fig. 1).



Fig.1. step-shaped connections instead of ramps

b) The two sides of the streets are not on the same levels in many cases. So similarly to above, a ramp should be used. However, the existing structures are unusable by wheelchairs. Moreover, the white lines which show the pedestrian crossing cannot be recognized by people with sight deficiencies. They should be made of materials

easily recognisable by a blind person's cane. Ideally, they should also be equipped with a sensor which reflects as soon as a white cane touches it (Fig. 2).



Fig.2. level is inconsistent between the two street sides at a pedestrian crossing place

c) Many bus stations in the studied district are located on a platform, and there is no ramp or other access for people in wheelchairs. It would also be better if the front of station was marked or covered by a material that blind people could recognise by touch (Fig. 3).



Fig. 3. No ramp is provided to access the bus stop

d) The junctions between the pavement and the street should have a gentle slope rather than the numerous instances of steep drops. This makes the situation difficult for elderlies and disabled persons to walk (Fig. 4).



Fig. 4. A very gentle slope is required

e) Most of the shops in the studied area are located at a higher level than the pavement (Fig. 5, 6). There is a drain under the street, which may be one of the reasons why all the shops are located higher. But this solution has caused serious problems. As a result, these shops are inaccessible to parents with a stroller, elderly people, or anyone in a wheelchair.



Fig. 5. Not accessible places on the street

5. Conclusion

This article has tried to highlight several problems in context of urban spaces in the studied area in Western Tehran; and to review easy and achievable solutions and guidelines to solve them. The problems we have addressed are just some particular instances among many others.

According to the points discussed above, disabled people in Tehran do not suffer so much from their disability as from isolation and solitude. It is therefore crucial for all urban facilities to be made accessible for everyone. If urban planners want to achieve the aim of a "city for all", they cannot neglect social minorities such as the disabled people.

The concept of a city for all is as a basis for human activities; it is a living being in interaction with itself, and with the people in that society.

Disabled people have a share in their cities, yet because of unsuitable urban environments, have only limited opportunities to be present in urban areas. This underlines the urgency of adapting and arranging urban areas so that they can be a basis for people with disabilities to develop their capabilities, creativity, and ultimately themselves.

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